U.S. Department of the Interior Bureau of Land Management Little Snake Field Office 455 Emerson Street Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: CO-100-2006-045 EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER:

COC45273: Four Mile Unit Federal Well #12-19 COC54473: Four Mile Unit Federal Well #44-24

PROJECT NAME: Four Mile Unit Wells

LEGAL DESCRIPTION: Both wells in Moffat County, Colorado.

Four Mile Unit Federal Well #12-19: Lot 2 Sec. 19, T10N, R92W, 6th PM Four Mile Unit Federal Well #44-24: SESE Sec. 24, T10N, R93W, 6th PM

APPLICANT: Western Gas Resources, Sand Wash Inc.

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.

Remarks: The proposed Four Mile Unit Wells would be located within Management Unit 3 (Little Snake Resource Management Plan). The objectives of Management Unit 3 are to improve soil and watershed values, increase forage production, and enhance livestock grazing. Public lands are open to oil and gas development consistent with the management objectives.

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

NEED FOR PROPOSED ACTION: To provide for the development of oil and gas resources and to supply energy resources to the American public.

PUBLIC SCOPING PROCESS: The Applications for Permit to Drill (APDs) have been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning February 13, 2006 when the APDs were received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The proposed action is to approve two Applications for Permit to Drill (APDs) submitted by Western Gas Resources, Sand Wash Inc. The company proposes to drill two natural gas wells near Great Divide, Colorado. APDs have been filed for the Four Mile Unit Federal Well #12-19 and the Four Mile Unit Federal Well #44-24 with the LSFO that include drilling and surface use plans. The APDs cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Western Gas Resources, Sand Wash Inc. in the drilling and surface use plans would be attached by the BLM as Conditions of Approval (COAs) to an approved APD.

The proposed wells would be located approximately 35 miles north of Craig, Colorado. The approximate date work would start is summer of 2006 and the estimated duration of construction and drilling is 20 days for each well. Moffat County Roads 7, 5, and 118 would be used to access the well sites. Western Gas Resources, Sand Wash Inc. proposes to construct 1236 feet of new road access and upgrade an existing two-track for approximately 1112 feet. Reclamation would be completed on approximately 500 feet of the existing two-track where the two-track would no longer be required for access. New road construction would conform to BLM specifications for a "resource road", with a 14-foot wide running surface. Total surface disturbance for the new access road and reconstruction of the two-track would be approximately three (3.0) acres. All road construction and upgrading would be on lease or private land and would not require a federal Right-of-Way.

The proposed well pads would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 2.0 acres would be disturbed for construction of each well pad. This would include the 300' by 210' well pad, the topsoil pile, and subsoil piles to be constructed at each well site. An unlined reserve pit would be constructed on the well pad to hold drill mud and cuttings. If a well is a producer, cut portions of the well site would be backfilled and unused portions of the well site would be stabilized and revegetated. If a gas well proves unproductive, the well would be properly plugged and the entire well pad and access road would be reclaimed.

Western Gas did not include plans for a gas sales pipeline with the APDs. A detailed written statement of work (Sundry Notice) would be filed with the BLM before pipeline installation. This Sundry Notice would be assessed, when it is received, for environmental impacts of a gas sales pipeline.

NO ACTION ALTERNATIVE: The "no action" alternative is that the wells would not be permitted and therefore no wells would be drilled. Western Gas holds a valid and current oil and gas lease for the area where the proposed Four Mile Unit Wells would be located. Under leasing contracts, the BLM has an obligation to allow mineral development if the environmental

consequences are not irreversible or too severe. The APD process is designed to overcome the no action situation of not accepting the APD through the mitigation of predicted environmental consequences. Since the proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, rejecting the APDs for the wells was considered, but will not be analyzed further in this EA.

<u>AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES</u>

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. Gas flaring reduces the health and safety risks in the vicinity of the well by burning combustible and poisonous gases like methane and hydrogen sulfide. The proposed action will not adversely affect the regional air quality.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 03/03/06

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 02/28/06

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, An Isolated Empire, A History of Northwestern Colorado, Bureau of

Land Management Colorado, Cultural Resource Series, Number 2 and Colorado Prehistory: A Context for the Northern Colorado River Basin, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project(s), Western Gas Resources, Four Mile Fed 12-19 and 44-24 Well Pads and Access, have undergone a Class III cultural resource survey:

Hays, Heidi Guy

2005 Cultural Resource Inventory of the Western Gas Resources, Inc., Federal 44-24, 12-19, and 13-18 Well Pads, Moffat County Colorado. SWCA 2005-350: BLM 127.10.05. SWCA Environmental Consultants, Broomfield, Colorado.

Baer, Sarah

2005 Addendum to the Cultural Resource Inventory of the Western Gas Resources, Inc., Federal 12-19 Well Pad, Moffat County, Colorado. SWCA-350; BLM 127.11.05. SWCA Environmental Consultants, Broomfield, Colorado.

The survey identified no eligible to the National Register of Historic Places prehistoric cultural resources. The proposed project may proceed as described in this EA with the following mitigative measures in place.

Mitigative Measures:

The following standard stipulations apply for this project:

- 1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:
- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction

Name of specialist and date: Henry S. Keesling 02/21/06

ENVIRONMENTAL JUSTICE

Affected Environment: The project would not directly affect the social, cultural, or economic well being and health of Native American, minority or low-income populations. The project area is relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts from the project.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Louise McMinn 02/23/06

FLOOD PLAINS

Affected Environment: Active floodplains and flood prone zones are avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property will result from the proposed action.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 03/03/06

INVASIVE, NONNATIVE SPECIES

Affected Environment: Cheatgrass, whitetop, halogeton, Canada thistle, and other biennial thistles are known to occur on these allotments. There is the potential for noxious weeds, such as dalmatian toadflax, knapweeds, and others, to exist and spread in these areas. Given an opportunity, these species are capable of out competing native vegetation communities, and becoming the dominant cover type without appropriate management.

Environmental Consequences: The surface disturbing activities and associated traffic involved with drilling two new wells and upgrading and constructing necessary access roads will create a favorable environment, and provide a mode of transport for invasive

species and other noxious weeds to become established. Invasive species can be spread through a variety of means including vehicular travel, wind, water, and wildlife and livestock movement. Required mitigation attached as Conditions of Approval to minimize disturbance, and the utilization of interim reclamation techniques would facilitate control of invasive species and reduce the potential of long-term infestation of annual and noxious weed species. All principles of Integrated Pest Management should be employed to control noxious weeds on public lands.

Mitigative Measures: None

Name of specialist and date: Curtis Bryan 02/27/06

MIGRATORY BIRDS

Affected Environment: There are no raptor nests located within a one-mile radius of the proposed well sites. Great Divide provides nesting habitat for a variety of migratory birds. One species listed on USFWS's Bird of Conservation Concern List, the sage sparrow, likely nests in the area. Additional birds that may nest in the area include the vesper sparrow and sage thrasher.

Environmental Consequences: The proposed action has a low potential to result in the take of any migratory bird species. Nesting of migratory birds may be disrupted and nests could be lost if construction activities are conducted during the nesting period (May – July). As this would only impact seven acres of sagebrush habitat, the potential for take would remain low. Disturbing seven acres of nesting habitat would not significantly impact migratory birds, however, increased fragmentation of habitat from oil and gas development may decrease the suitability of the habitat for some species. It is unlikely that this disturbance would have a measurable influence on the abundance or distribution of breeding migratory birds at a landscape level.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 02/23/06

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council, and the Colorado Commission of Indian Affairs on January 21, 1999. The letter listed the projects that the BLM would notify them on and projects that would not require notification. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Henry S. Keesling 02/21/06

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 03/03/06

T&E SPECIES – ANIMALS

Affected Environment: The project area provides general habitat for greater sage grouse, a BLM sensitive species. The area does not provide any critical habitat, such as nesting or brooding rearing for sage grouse.

Environmental Consequences: No Federally ESA listed animal species would be affected by the proposed action. Impacts to grouse species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat and loss of habitat. Other impacts, such as habitat fragmentation and the spread of exotic plants can also degrade sage grouse habitat (Connelly et al. 2004). These impacts are more significant during critical seasons, such as winter or reproduction. The proposed action is not located in crucial habitat for sage grouse, and therefore, it is unlikely the project would have significant impacts to sage grouse. Sage grouse using the area are likely to be displaced during construction and drilling activities and may find the project area less suitable once construction is complete.

References:

Bureau of Land Management. 1991. Colorado Oil and Gas Leasing and Development. Final Environmental Impact Statement. U.S. Dept. of Interior.

Connelly, J.W., S.T. Knick, M.A. Schroeder and S.J. Stiver. 2004. Conservation Assessment of Greater Sage-grouse and Sagebrush Habitats. Western Association of Fish and Wildlife Agencies. Unpublished Report. Cheyenne, Wyoming.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 02/23/06

T&E SPECIES – PLANTS

Affected Environment: There are no federally listed threatened or endangered plant species within or in the vicinity of either of the proposed wells.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 02/22/06

T&E SPECIES - SENSITIVE PLANTS

Affected Environment: There are no BLM sensitive plant species within or in the vicinity of either of the proposed wells.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Hunter Seim 02/22/06

WASTES, HAZARDOUS OR SOLID

Affected Environment: If the release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there will be no impact on the environment.

Environmental Consequences: Consequences will be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences will occur, but they can be remedied, and long-term impacts will be minimal.

Mitigative Measures: None

Name of specialist and date: Duane Johnson 02/16/06

WATER QUALITY/HYDROLOGY – GROUND

Affected Environment: Fresh water within the Wasatch and Fort Union Formations may occur. The surface casings will be adequate to protect any fresh water zones within 800 feet of the surface, coupled with production casing and cement behind pipe form TD to approximately 4000'depth. This will leave an open annular space from 800' to 4000', all within the Wasatch and Fort Union Formations. Waters within porous zones in these formations are of similar quality and can be allowed to commingle.

Environmental Consequences: With the use of proper construction practices, drilling practices, and with best management practices no significant adverse impact to groundwater aquifers and quality is anticipated to result from the proposed action. A geologic and

engineering review was performed on the 8-point drilling plans to ensure that the cementing and casing programs adequately protect the downhole resources.

Mitigative Measures: None

Name of specialist and date: Fred Conrath 02/28/06

WATER QUALITY/HYDROLOGY – SURFACE

Affected Environment: The project areas are located on gently sloping hillsides. Runoff water affected by this project would flow in an easterly and northerly direction to Dry Gulch, a tributary of the Little Snake River. All stream segments within the affected environment are presently supporting their classified uses.

Environmental Consequences: The well locations would require new construction of one short access road and upgrading to 1,112 feet of existing two-track road. Construction of the new road and well pads, upgrading to the existing two-track, and installation of drainage features should follow the recommendations provided in the Surface Operating Standards for Oil and Gas Development, 3rd Edition.

Increased sedimentation to Dry Gulch and the Little Snake River during spring runoff or from high intensity summer/fall rainstorms would be the greatest potential impact to water quality. Localized increases in water turbidity and contamination due to fluid leaks or spills from equipment are potential impacts to waterways as a result of the project. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Surface Use Plan and the Conditions of Approval will reduce the potential impacts caused by surface runoff.

Mitigative Measures: None

Name of specialist and date: Barb Blackstun 03/03/06

WETLANDS/RIPARIAN ZONES

Affected Environment: No riparian habitat exists in the project area.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 02/23/06

WILD & SCENIC RIVERS

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 02/28/06

WILDERNESS, WSAs

Affected Environment: Not present.

Environmental Consequences: Not applicable.

Mitigative Measures: Not applicable

Name of specialist and date: Jim McBrayer 02/28/06

NON-CRITICAL ELEMENTS

FLUID MINERALS

Affected Environment: The proposed action is in favorability zone 4 (highest for oil and gas potential). These wells will penetrate the Wasatch, Fort Union, Lance, Fox Hills, and Lewis Shale Formations. In these wells, conventional sands will be explored for possible economic oil and gas recovery in most of the above-mentioned formations. The casing and cementing programs are adequate to protect downhole resources. Possible coals in the Wasatch and Lance Formations are not thick enough for mining and do not contain enough gas to be considered as viable CBM targets. The Fort Union Big Coal will be protected with casing and cement behind pipe (TOC approx. 4000').

Environmental Consequences: The proposed casing and cementing programs appear to be adequate to protect and/or isolate all resources identified above.

Mitigative Measures: None

Name of specialist and date: Fred Conrath 02/28/06

PALEONTOLOGY

Affected Environment: The geologic formation at the surface is the <u>Tertiary Age formation</u>, <u>Wasatch Formation</u>, <u>Cathedral Bluffs Tongue (Twc)</u>, a variegated claystone, mudstone and sandstone formation. This formation has been classified a Class II formation for the potential for occurrence of scientifically significant fossils.

Environmental Consequences: Scientifically significant fossils are occasionally found within this formation (Armstrong & Wolney, 1989). The potential for discovery of significant fossils on this location is considered to be moderate. If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil. Ceasing operations and notifying the Field Office Manager immediately upon discovery of a fossil during construction activities can effectively mitigate this impact. An assessment of the significance is made and a plan to retrieve the fossil or the information from the fossil is developed.

The proposed action could also constitute a beneficial impact to paleontological resources by increasing the chances for discovery of scientifically significant fossils.

Mitigative Measures: "Standard Discovery Stip", i.e., "If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed time frame. Operations will resume only upon written notification by the Authorized Officer."

References

Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

Miller, A.E., 1977, Geology of Moffat County, Colorado, Colo. Geol. Surv. Map Series 3, 1:126,720.

Name of specialist and date: Robert Ernst 02/28/06

RANGE MANAGEMENT

Affected Environment: Both wells are located within the North Great Divide Allotment. This allotment is permitted to Roger Pilgrim.

Environmental Consequences: Some loss of forage is expected due to the removal of vegetation, however at this time it should not warrant a reduction in the permitted use.

Mitigating Measures: None

Name of specialist and date: Andrea Minor 03/01/06

SOILS

Affected Environment: The proposed Four Mile Unit Wells would be located within the Berlake-Taffam-Gretdivid complex soil-mapping unit. This very deep, well-drained soil is found on hills. It formed in residuum and colluvium derived from sandstone. Slopes within this unit average 10 to 20 percent. Runoff is medium and the hazard of wind and water erosion is moderate to high. These soils are capable of producing about 15 bushels of winter wheat an acre in a wheat-fallow rotation.

Environmental Consequences: The construction and operation of the Four Mile Unit wells would affect soils within and immediately adjacent to the proposed area of disturbance. The access road for the Four Mile Well #12-19 was changed at the onsite to make use of an existing two-track. The existing two-track road has less of a grade than the staked originally proposed road and less soil erosion would be anticipated by using the two-track.

Increased soil erosion from wind and water would occur during construction of the well pads and access roads. Erosion would continue throughout the operational life of the wells. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur. Vegetation and soil would be removed from approximately seven acres of land. Soil productivity would decline due to reduced soil microbial activity, impaired water infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Soil erosion would be reduced to an acceptable level with the mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. This mitigation will reduce the potential to have excessive sediments and salts in runoff water from the well site.

Mitigative Measures: Additional mitigative measures will be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the roads or well pads.

Name of specialist and date: Barb Blackstun 03/03/06

VEGETATION

Affected Environment: The vegetation at Well 12-19 is predominantly Wyoming big sagebrush with small patches of winterfat. The understory consists of bluebunch wheatgrass, western wheatgrass, and associated forbs. The vegetation at Well 44-24 is composed of Wyoming big sagebrush and rabbitbrush with an associated grass and forb understory. The site appears to have been disturbed in the recent past.

Environmental Consequences: The Proposed Action would completely remove native vegetation from an approximately 2.0 acre area for each well. This removal would be insignificant in the larger landscape, but would be in addition to the approximately 3.0 acres of roads within a one-mile radius of the Proposed Action. As long as reseeding and

subsequent reestablishment of recommended native plants occurs upon well completion, the Proposed Action would not adversely affect the surrounding plant community. These sites are susceptible to invasion by cheatgrass and introduced species of thistles. It will be imperative that all COAs regarding weed control and revegetation are followed to avoid increasing cheatgrass presence on and in areas surrounding the Proposed Action.

The No Action Alternative would not impact the native plant community as no disturbance would occur.

Mitigative Measures: None

Name of specialist and date: Andrea Minor 03/01/06

WILDLIFE, AQUATIC

Affected Environment: The proposed action is located in a sagebrush/grass community and does not provide habitat for aquatic wildlife.

Environmental Consequences: None

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 02/23/06

WILDLIFE, TERRESTRIAL

Affected Environment: The proposed well sites provide habitat for elk, mule deer and antelope. All three species use the area during moderate winters. The project area also provides habitat for small mammals, birds and reptiles.

Environmental Consequences: Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. The proposed action is not located in crucial habitat for most species, and therefore, it is unlikely the project would have significant impacts to wildlife species. All wildlife species using the area are likely to be displaced during construction and drilling activities and may find the project area less suitable once construction is complete.

Most small mammals using the project area would be capable of avoiding construction equipment and should not be directly harmed by these activities. Some burrowing animals may be killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

Mitigative Measures: None

Name of specialist and date: Desa Ausmus 02/23/06

OTHER NON-CRITICAL ELEMENTS: For the following elements, those brought forward for analysis will be formatted as shown above.

Non-Critical Element	NA or Not	Applicable or	Applicable & Present and
	Present	Present, No Impact	Brought Forward for Analysis
Fluid Minerals			See Fluid Minerals
Forest Management	BB		
	02/24/06		
Hydrology/Ground		FC 02/28/06	
Hydrology/Surface		BB 03/03/06	
Paleontology			See Paleontology
Range Management			See Range Mgmt.
Realty Authorizations	LM		
	02/23/06		
Recreation/Travel Mgmt		RS 03/02/06	
Socio-Economics		LM 02/23/06	
Solid Minerals		RE 02/28/06	
Visual Resources		JM 02/28/06	
Wild Horse & Burro	VMD		
Mgmt	03/02/06		

<u>CUMULATIVE IMPACTS SUMMARY</u>: Cumulative impacts may result from the development of the Four Mile Unit Wells when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the area. Currently no producing wells exist within a one-mile radius of the proposed well. Past or existing actions near the project area that would influence the landscape include wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Only a small reduction in available forage would be anticipated. Some wildlife species may be temporarily displaced by construction at the well site, access road, and future pipeline routes, but should return once construction is completed. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

The cumulative effects of projected oil and gas development are minimized through Best Management Practices identified in the Surface Use Plan of the APD and the BLM required mitigation in the Conditions of Approval for the APD. Proper construction and drilling practices must comply with federal and state environmental regulations. All oil and gas wells in the area would be completed in accordance with Onshore Order No. 2. Reasonably foreseeable mineral

development would occur under the guidelines of the Little Snake Resource Management Plan and the Colorado Oil and Gas Leasing and Development EIS.

STANDARDS:

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The project area provides habitat for a variety of wildlife species. The proposed action is not expected to significantly impact wildlife species or their habitat. The proposed action would not preclude this standard from being met on a landscape level.

Name of specialist and date: Desa Ausmus 02/23/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: The project area provides habitat for greater sage grouse, a BLM sensitive species. The proposed action is not expected to significantly impact sage grouse or their habitat. The proposed action would not preclude this standard from being met on a landscape level.

Name of specialist and date: Desa Ausmus 02/23/06

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would completely remove existing vegetation. As long as the COAs concerning revegetation and weed control are adhered to, the native plant community would eventually return, and weeds would be kept in check, and thus meet this standard. The No Action Alternative would meet this standard as no disturbance would occur.

Name of specialist and date: Andrea Minor 03/01/06

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)

STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species within or in the vicinity of the Proposed Action. This standard does not apply.

Name of specialist and date: Hunter Seim 02/22/06

RIPARIAN SYSTEMS STANDARD: The riparian standard for healthy public lands will not be affected by the proposed action.

Name of specialist and date: Desa Ausmus 02/23/06

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Interim reclamation of the unused area on the well pads will be completed to minimize sheet and rill erosion from the well sites. When the well pads are no longer needed for production operations, the disturbed areas would be reclaimed to approximate original contours, topsoil would be redistributed, and adapted plant species would be reseeded.

These Best Management Practices would help to reduce accelerated erosion of the sites. No stream segments near this project are listed as impaired.

Name of specialist and date: Barb Blackstun 03/03/06

UPLAND SOILS STANDARD: The proposed action will not meet the upland soil standard for land health, but it is not expected to while the well locations and access roads are used for operations. The well pad sites and access roads will not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or are attached as mitigating measures that will reduce impacts to and conserve soil materials. Upland soil health will return to the well pad and access road disturbances after well abandonment and reclamation practices have been successfully achieved.

Name of specialist and date: Barb Blackstun 03/03/06

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

FINDING OF NO SIGNIFICANT IMPACT (FONSI) EA CO-100-2006-045

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

- 1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
- 2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
- 3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.
- 4. There are no highly controversial effects on the environment.
- 5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
- 6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.
- 7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
- 8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

- 9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.
- 10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

<u>DECISION AND RATIONALE</u>: I have determined that approving these two APDs is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval. The project will be monitored as stated in the Compliance Plan outlined below.

MITIGATION MEASURES: The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD's 13-point surface use plan, well location maps, and the Conditions of Approval are found in the well's case file labeled COC45273, Well #12-19 and COC54473, Well #44-24.

COMPLIANCE PLAN(S):

Compliance Schedule

Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

Monitoring Plan

The well location and access road will be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

Assignment of Responsibility

Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Legal Instruments Examiner will also be involved.

DATE SIGNED: 03/16/06